

IN THE CLAIMS:

Please cancel claims 1-20.

Please add new claims 21-46.

Claim 21 (new): A method of generating and screening for one or more high free energy forms of a compound, element or mixture, said method comprising the steps of:

disposing a non-solid sample of the compound, element or mixture in a plurality of capillary tubes;

solidifying the sample in the plurality of capillary tubes, whereby a plurality of solids is generated; and

determining whether one or more high free energy forms were generated using an analytical method selected from the group consisting of visual analysis, microscopic analysis, thermal analysis, diffraction analysis, and spectroscopic analysis.

Claim 22 (new): The method of claim 21 wherein the solidifying step comprises crystallizing the sample.

Claim 23 (new): The method of claim 21 wherein the solidifying step comprises the use of an antisolvent.

Claim 24 (new): The method of claim 21 wherein the solidifying step is selected from the group consisting of solvent evaporation, antisolvent addition, gel diffusion, and thin-layer deposition.

Claim 25 (new): The method of claim 21, further comprising the step of preparing the sample from a supersaturated solution of the compound, element or mixture.

Claim 26 (new): The method of claim 21, wherein said isolated high free energy form is stabilized within the capillary tube by adding a stabilizing agent.

Claim 27 (new): The method of claim 26, wherein said isolated high free energy form is stable within the capillary tube for at least 24 hours.

Claim 28 (new): The method of claim 21, further comprising the step of stabilizing the high free energy form for at least 24 hours essentially by maintaining the high free energy form in the capillary tube.

Claim 29 (new): The method of claim 21, wherein the sample is placed in at least two sets of capillary tubes, and at least one set differs from at least one other set.

Claim 30 (new): The method of claim 29, wherein the capillary tubes of said at least one set have a different inner diameter than the capillary tubes of said at least one other set.

Claim 31 (new): The method of claim 29, wherein the sample is placed in at least four sets of capillary tubes, and each set differs from the other set with respect to the size or surface of the capillary tubes within said sets.

Claim 32 (new): The method of claim 21, wherein said at least one capillary tube is coated with a substance on the interior of said tube.

Claim 33 (new): The method of claim 21, wherein the step of determining whether the high free energy form was generated comprises generating data indicative of the relative free energy of the generated form and comparing said data to data relating to a known form.

Claim 34 (new): The method of claim 21 wherein the high energy forms exhibit different colors.

Claim 35 (new): The method of claim 21, further comprising identifying the high free energy forms by visual analysis.

Claim 36 (new): The method of claim 21 wherein the microscopic analysis is electron microscopy.

Claim 37 (new): The method of claim 21 wherein the diffraction analysis is x-ray diffraction.

Claim 38 (new): The method of claim 21 wherein the spectroscopic analysis is infrared spectroscopy.

Claim 39 (new): The method of claim 21 further comprising analyzing the known solid form to determine the free energy.

Claim 40 (new): The method of claim 21, wherein the step of determining whether one or more high free energy forms were generated comprises determining whether a distribution of solid forms occurred.

Claim 41 (new): The method of claim 21, wherein the step of determining whether a high free energy form was generated comprises thermal analysis.

Claim 42 (new): The method of claim 41 wherein the thermal analysis is determining the melting points.

Claim 43 (new): A method of generating and screening for one or more high free energy forms of a compound, element or mixture, said method comprising the steps of:

disposing a non-solid sample of the compound, element or mixture in a plurality of capillary tubes;

solidifying the sample in the plurality of capillary tubes, whereby a plurality of generated solids is generated;

determining whether one or more high free energy forms were generated using an analytical method selected from the group consisting of visual analysis, microscopic analysis, thermal analysis, diffraction analysis, and spectroscopic analysis;

determining the number of occurrences of each of said solid forms; and

assigning a relative free energy to each of said solid forms based on the number of occurrences, wherein a high free energy form is associated with a lower number of occurrences.

Claim 44 (new): The method of claim 43 wherein the plurality comprises at least 10 capillary tubes.

Claim 45 (new): The method of claim 44 wherein the plurality comprises at least 50 or more capillary tubes.

Claim 46 (new): The method of claim 45 wherein the plurality comprises at least about 150 capillary tubes.

Claim 47 (new): The method of claim 43, wherein the plurality of capillary tubes comprises at least two sets of capillary tubes, and at least one set differs from at least one other set.

Claim 48 (new): The method of claim 47, wherein the capillary tubes of said at least one set have a different inner diameter than the capillary tubes of said at least one other set.

Claim 49 (new): The method of claim 47, wherein the plurality of capillary tubes comprises at least two four of capillary tubes, and each set differs from the other sets with respect to the size or surface of the capillary tubes within said sets.

Claim 50 (new): The method of claim 43, wherein said at least one capillary tube is coated with a substance on the interior of said tube.

Claim 51 (new): A method of generating and screening for one or more high free energy forms of a compound, element or mixture, said method comprising the steps of:

disposing a non-solid sample of the compound, element or mixture in a plurality of capillary tubes;

solidifying the sample in the plurality of capillary tubes, whereby a plurality of solids is generated; and

determining whether one or more high free energy forms were generated.

Claim 52 (new): The method of claim 51, wherein the step of determining whether a high free energy form was generated comprises visual analysis.

Claim 53 (new): The method of claim 51, wherein the step of determining whether a high free energy form was generated comprises microscopic analysis.

Claim 54 (new): The method of claim 51, wherein the step of determining whether a high free energy form was generated comprises diffraction analysis.

Claim 55 (new): The method of claim 51, wherein the step of determining whether a high free energy form was generated comprises spectroscopic analysis.